

# PENNSYLVANIA'S CHRISTMAS TREE SCOUTING REPORT

2010, Report 11: June 2, 2010

Weekly newsletter compiled by Sarah Pickel, PA Department of Agriculture.

This week's report includes scouting information from: Jim Fogarty (Halabura Tree Farm), Karen Najda (PDA), Susan Newhart (Arcadia Trees), Linda Signarovitz (scouting consultant), Brian Schildt (PDA), and Cathy Thomas (PDA).

Growing Degree Day totals as of Tuesday, June 1<sup>st</sup>, were 764.5 in Elizabethtown, Lancaster County, 745 in New Cumberland, Cumberland County, and 583 in New Ringgold, Schuylkill County. Regional GDD totals collected last Thursday, May 26<sup>th</sup> in Northwest PA were as follows: 458 in Clarion County, 452 in the Millcreek area of Erie County, 379 in the Waterford area of Erie County, 542 in Mercer County and 401 in Warren County. [Northwest data courtesy of Ruth Benner, Extension Educator – Penn State Cooperative Extension, Erie County.]

Today in northern York County, Cryptomeria Scale crawlers were found moving on the needles. Last week in the same location, only eggs were found. This crawler emergence is more than two weeks earlier than last year's crawler emergence, but it does fall within the accepted growing degree day emergence range for this armored scale pest, which is 600 – 800 GDD. As of today in Schuylkill County, there were eggs found under the adult scale coverings, but crawlers were not



Figure 1: Cryptomeria adult scale (L) and scale crawler (R) [S. Pickel, PDA]

yet found. Growers who would normally look for these crawlers to emerge in the middle of June should be looking now. Many conifer species may be host to this scale, but the preferred hosts are the true firs. A hand lens is required to see the flat, oval-shaped, bright yellow crawlers moving on the needles around the white-yellow adult scales. [Fig. 1] The scales will be found on the undersides of yellow-spotted needles

located at the base of the tree, near the trunk. Because insecticide applications targeting the crawlers will need to penetrate the lower branches of the tree, it is important that grass and weeds around the trees be cut to allow for adequate coverage. Crawler emergence will be staggered, so growers should make 2 applications of a registered insecticide 7 – 10 days apart. If crawlers are still found a week after the 2<sup>nd</sup> application, a 3<sup>rd</sup> spray may be necessary. The 2010 *Insecticides and Miticides Update for PA Christmas Tree Pests*

can be found at the site:

<http://ento.psu.edu/extension/christmas-trees/scouting-reports>.

Elongate Hemlock Scale crawlers continued to emerge in Schuylkill and York Counties this week. Bright yellow crawlers can be found moving on the needles around the brown, oblong female scales and the white flocked, or fuzzy, male scales. They will be found in the same location on the trees as Cryptomeria scales, which means weed control will also be important for insecticide applications targeting elongate hemlock scale to achieve adequate coverage.

In York and Lancaster County, crawlers of Pine Needle Scale continue to emerge. Crawlers will be found near needles that have the white, oblong adult scales. As the red-brown scale crawlers settle and continue to develop, they will flatten and turn yellow and will eventually start to develop white scale coverings like the adults. [Fig. 2] When scale crawlers are found, two applications of a registered insecticide should be made one week apart.

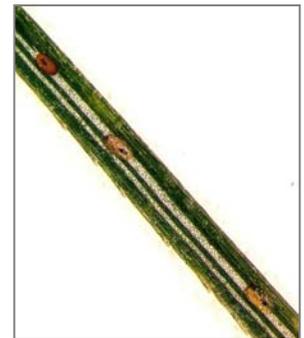


Figure 2: Pine needle scale crawlers [S. Pickel, PDA]



Figure 3: Young bagworm [S. Pickel, PDA]

Bagworm larvae continue to emerge and feed in Schuylkill and York Counties. The larvae continue to grow, but are still small enough to be susceptible to Bt and other insecticide applications. [Fig. 3] As the larvae grow and the bag size increases, they will be less susceptible so, growers should make their control applications earlier rather than later. All

conifer species are hosts of bagworm.

Growers of Scotch and Austrian pine should be on the look out for crawlers of Striped Pine Scale. As of last week in Lancaster County, crawlers still had not emerged, but the hot temperatures we've experienced this week should be speeding up this emergence. The soft scales are brown with white stripes or spots and are shaped like a helmet. They will be found along the twigs of hard pines and because they can be a ½ cm or more in length, they will be visible without a hand lens. One obvious symptom of the scale feeding will be the black sooty mold covering the twigs and needles which develops on the honey dew excrement of the scales. When

crawlers do emerge from under the adult scales, they will be salmon or peach colored and can be found on the twigs and needles. [Fig. 4] That will be the time to control this pest with the application of a registered insecticide.



*Figure 3: Striped pine scale adults with crawlers [B. Schildt, PSU]*

Lastly, spruce needle rust is no longer sporulating in areas of Schuylkill County. The fruiting bodies which had broken the surface of the needles of Colorado Blue and Serbian Spruce are now brown and dried up. In areas in which sporulation has stopped, fungicide application may also stop.

*The next scouting report will be available June 9, 2010.*